WHAT IS CLAIMED IS:

1. A semiconductor device comprising:

a substrate having an insulating surface;

a thin film transistor formed over the substrate, said thin film transistor comprising a channel formation region comprising a semiconductor layer having an amorphous structure; source and drain regions comprising a semiconductor layer including one conductive type impurity elements, and interposed between said substrate and said semiconductor layer having the amorphous structure;

a first interlayer insulating layer comprising an inorganic material and formed over said TFT wherein said first interlayer insulating layer is in contact with at least a part of the channel formation region;

a second interlayer insulating layer comprising an organic material and formed on the first interlayer insulating layer; and

a pixel electrode formed in contact with the second interlayer insulating layer.

2. A semiconductor device having over a substrate having an insulating surface a thin film transistor with a channel formation region formed of a semiconductor layer having an amorphous structure, a source region and a drain region each formed of a semiconductor layer containing one-conductive type impurity elements therein, and a gate electrode formed between the semiconductor layer having the amorphous structure and the substrate, the semiconductor device comprising:

a first interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer

containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a second interlayer insulating layer comprising an organic material and formed on the first interlayer insulating layer;

a pixel electrode formed in contact with the second interlayer insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring of another substrate;

wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode.

3. A semiconductor device having over a substrate having an insulating surface a thin film transistor with a channel formation region formed of a semiconductor layer having an amorphous structure, a source region and a drain region each formed of a semiconductor layer containing one-conductive type impurity elements therein, a gate electrode formed between the semiconductor layer having the amorphous structure and the substrate, and an insulating layer formed on the gate electrode, the semiconductor device comprising:

an interlayer insulating layer comprising an inorganic material and formed on the semiconductor layer having the amorphous structure and the semiconductor layer containing the one-conductive type impurity elements so as to be in contact with at least a part of the channel formation region;

a pixel electrode formed in contact with the insulating layer; and

an input terminal portion formed along an end portion of the substrate and electrically connected to a wiring of another substrate;

wherein the input terminal portion includes a first layer comprising the same material as that of the gate electrode and a second layer comprising the same material as that of the pixel electrode.

4. A semiconductor device as claimed in claim 1 , wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

5. A semiconductor device as claimed in claim 2 , wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

6. A semiconductor device as claimed in claim 3, wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

7. A semiconductor device as claimed in claim 4, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound

film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

8. A semiconductor device as claimed in claim 5, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

9. A semiconductor device as claimed in claim 6, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

10. A semiconductor device as claimed in claim 1, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

11. A semiconductor device as claimed in claim 2, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

12. A semiconductor device as claimed in claim 3, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

13. A method of manufacturing a semiconductor device, the method comprising:

a first step of forming a gate electrode over a substrate having an insulating surface;

a second step of forming a gate insulating layer on the gate electrode;

a third step of forming a semiconductor layer having an amorphous structure on the gate insulating layer;

a fourth step of forming a semiconductor layer containing a one-conductive type impurities on a semiconductor layer having the amorphous structure;

a fifth step of forming a source wiring and a drain wiring in contact with the semiconductor layer containing the one-conductive type impurities;

a sixth step of removing a pars of the semiconductor layer having the one-conductive type impurities and the semiconductor layer having the amorphous structure with the source wiring and the drain wiring as masks;

a seventh step of forming a first interlayer insulating layer comprising an inorganic material on the source wiring and the drain wiring;

an eighth step of forming a second interlayer insulating layer comprising an organic material on the first interlayer insulating layer; and

a ninth step of forming a pixel electrode on the second interlayer insulating layer.

14. A method of manufacturing a semiconductor device, comprising:

a first step of forming a gate electrode and a first layer of an input terminal portion which is electrically connected to a wiring on another substrate over a substrate having an insulating surface;

a second step of forming a gate insulating layer on the gate electrode;

a third step of forming a semiconductor layer having an amorphous structure on the gate insulating layer;

a fourth step of forming a semiconductor layer containing one-conductive type impurities therein on the semiconductor layer having the amorphous structure;

a fifth step of forming a source wiring and a drain wiring in contact with the semiconductor layer containing the one-conductive type impurities;

a sixth step of removing a part of the semiconductor layer containing the one-conductive type impurities and the semiconductor layer having the amorphous structure with the source wiring and the drain wiring as masks;

a seventh step of forming a first interlayer insulating layer comprising an inorganic material on the source wiring and the drain wiring;

an eighth step of forming a second interlayer insulating layer comprising an organic material on the first interlayer insulating layer;

a ninth step of selectively removing the first interlayer insulating layer, the second interlayer insulating layer and the gate insulating layer to expose the first layer of the input terminal portion; and

a tenth step of forming a pixel electrode and a second layer of the input terminal portion on the second interlayer insulating film.

15. A method of manufacturing a semiconductor device, comprising:

a first step of forming a gate electrode and a first layer of an input terminal portion which is electrically connected to a wiring on another substrate over a substrate having an insulating surface;

a second step of forming a gate insulating layer on the gate electrode;

a third step of forming a semiconductor layer having an amorphous structure on the gate insulating layer;

a fourth step of forming a semiconductor layer containing one-conductive type impurities therein on the semiconductor layer having the amorphous structure;

a fifth step of selectively removing the gate insulating layer to expose the first layer of the input terminal portion;

a sixth step of forming a pixel electrode and a second layer of the input terminal portion in contact with the gate insulating layer;

a seventh step of forming a source wiring and a drain wiring in contact with the semiconductor layer containing the one-conductive type impurities;

an eighth step of removing a part of the semiconductor layer containing the one-conductive type impurities and the semiconductor layer having the amorphous structure with the source wiring and the drain wiring as masks; and

a ninth step of forming a first interlayer insulating layer comprising an inorganic material on the source wiring and the drain wiring.

16. A method of manufacturing a semiconductor device as claimed in claim 13, wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

17. A method of manufacturing a semiconductor device as claimed in claim 14, wherein the gate electrode is comprising a heat-resistant electrically conductive material, or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

18. A method of manufacturing a semiconductor device as claimed in claim 15, wherein the gate electrode is comprising a heat-resistant electrically conductive material,

or the heat-resistant electrically conductive material and a low-resistive electrically conductive material.

19. A method of manufacturing a semiconductor device as claimed in claim 16, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

20. A method of manufacturing a semiconductor device as claimed in claim 17, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

21. A method of manufacturing a semiconductor device as claimed in claim 18, wherein the heat-resistant electrically conductive material is comprising an element selected from titanium (Ti), tantalum (Ta) or tungsten (W), a compound that contains any one of the above elements, a compound film that combines the above elements together, or a nitride that contains any one of the above elements; and

wherein the low-resistive electrically conductive material is comprising a material containing aluminum (Al).

22. A method of manufacturing a semiconductor device as claimed in claim 13, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

23. A method of manufacturing a semiconductor device as claimed in claim 14, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.

24. A method of manufacturing a semiconductor device as claimed in claim 15, wherein the semiconductor device comprises one of a personal computer, a video camera, a portable information terminal, a digital camera, a digital video disc player, an electronic play device and a television.